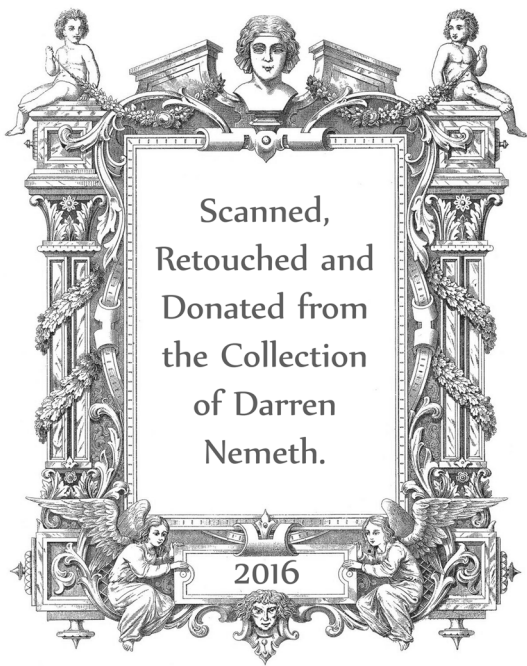


PICTURE TAKING AT NIGHT



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PICTURE TAKING AT NIGHT

PICTURE taking is no longer confined to the sunny days. With the flashlight and other sources of light you can now make pictures any time, anywhere; indoors or out. There are innumerable pictures that can be made after the sun goes down; campfire scenes, fireworks, moonlight pictures, lightning flashes, lighted streets and squares, illuminated buildings, floodlight effects, interiors electrically lighted, table top studies, greeting cards and fires are but a few of the opportunities for striking and effective pictures that can be made after the sun has gone down.

In the following pages we will outline some of the many possibilities. These instructions will necessarily be more in the nature of suggestions than directions, owing to the great differences in each particular subject; a few general hints however, will doubtless be found helpful.

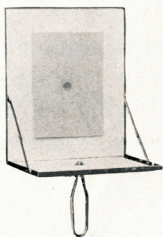
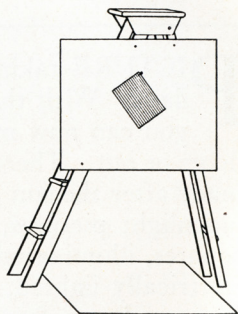
Flashlight Pictures

A flashlight is the most concentrated form of artificial light and with it we can obtain the same effects that are produced by sunlight. It is especially useful in the home for indoor portraits, group pictures and interiors that do not get much sunlight, as it is easily controlled and can be used to produce any degree of contrast or softness.

The requirements for making flashlight pictures are few and simple. A firm support for your Kodak, a package of Eastman Flash Sheets or Eastman Flash Cartridges, a screen for diffusing the light, and if a flash is to be made

at some distance from the subject, a reflector should be used to increase the illumination on the subject. The Photoflash Lamp will be found very convenient when making flashlight pictures, see page 8.

A stepladder or a piece of lath or moulding about 6 feet long tied to the back of a chair to which a sheet of white cardboard has been tacked, can be used to advantage as a holder for the Eastman Flash Sheets. The flash sheet is pinned to the center of the cardboard which acts as a reflector. An extra sheet of cardboard laid on the floor will prevent any sparks from damaging carpet or rug.



The Kodak Flash Sheet Holder offers the simplest and most convenient method of burning flash sheets. It can be held in the hand or screwed to a tripod head, the sheet being attached to the center of the pan and ignited by a match from the rear. The white fire-proof lining of the holder acts as a reflector and increases the illumination.

Never place more than one sheet at a time in the holder.

A safe and convenient method of using Eastman Flash Cartridges is to lay the cartridge and fuse on a tin plate and ignite the fuse with a match in the end of a split stick *at least two feet long*. As the flame will spread, be sure that there are no curtains or other inflammable materials within reach.

While flash sheets and powders are, by their very nature, highly inflammable, they are safe if the directions sent with them are carefully read and closely followed.

Eastman Flash Sheets are made in three sizes numbered 1, 2 and 3. For portraiture the size to use is determined by the complexion of the subject, color of the walls and the distance of the flash from the subject. For a fair complexion, light hair, and room of medium size with light walls and hangings, use a No. 1 (smallest) Flash Sheet. A medium complexion would require a No. 2 (medium) sheet and a very dark one a No. 3 (largest) sheet. The farther the subject is from the light the softer the effect. Strong, bold lightings are made by placing the light close to the subject. Six feet is about the correct distance for the best results in average cases. The light may be placed in any position except within the immediate range of the lens.

Eastman Flash Sheets burn more slowly than flash cartridges, producing a much softer light and are better for portraits. The subject should be warned not to move, as the picture is not made *instantaneously*; the flash lasts about one second.

Eastman Flash Cartridges can be obtained in three sizes, they are numbered 4, 5 and 6. No. 4 (formerly No. 3) is the smallest size, No. 5 (formerly No. 2) medium size, and No. 6 (formerly No. 1) the largest size. The cartridges are recommended when instantaneous exposures must be made.

A common error among beginners is to place the flash too low. If the distance from the subject is six feet, the flash should be about two feet higher than the subject's head, to give good modeling and softness.

A reflector and screen will be found very helpful in securing artistic results, as they equalize the lighting on the sides of the face. A reflector for softening contrasts is easily arranged. For a head and shoulder portrait a white towel spread over the back of a high-backed chair will serve the purpose. Do not place it too low or the light coming up from below will flatten the shadow side of the



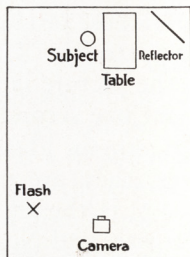
A Portrait with Home Atmosphere.

Subject at desk eight feet from camera.

One No. 3 Eastman Flash Sheet used ten feet from subject and five feet from floor.

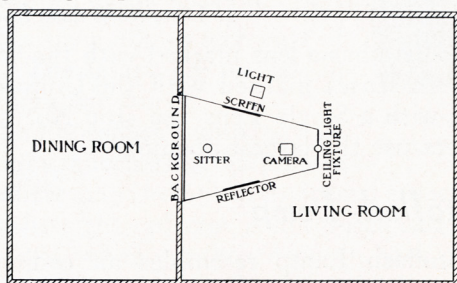
White cotton cloth reflector.

Medium dark walls.



face. The reflector should be placed a little forward of the subject, to give better half-tones between high-lights and shadows and to prevent stray rays of light from reflecting into the lens. With standing figures the reflector will have to be raised and may be hung over a tape or string fastened across any part of the room with push pins. The light screen can be similarly arranged, using a piece of cheesecloth at least a yard square.

The diagram below illustrates one of the many ways in which the reflector and screen may be used. Every room has a number of door and window casings into which push pins may be driven without damage, and these offer sufficient opportunity for varying the arrangement shown, to suit any lighting required.



To be specific; let us arrange our subject for an exposure, taking for example a lighting and pose similar to the one on page 6. If you are using a flash sheet without the Kodak Flash Sheet Holder you will need a split stick *at least two feet long to hold the match*. With everything arranged as in the diagram and your subject posed naturally, open the shutter, ignite the flash sheet and as soon as it is consumed close the shutter. There is no need to hurry, as the usual illumination of the room will not affect the film in the few moments that the shutter is open just before and after the flash is made.

One point in flashlight portraiture is to keep your subject from showing any nervousness and this is best accomplished by not showing any trace of nervousness yourself.

The examples show the general lay-out which can be followed or changed to meet any particular requirement. A trial or two will demonstrate that successful pictures are not at all difficult to make. If the summary of conditions on page 8 is carefully considered you cannot go wrong.

SUMMARY

For Correct Lighting

1. Position of light.
2. Diffusion of light by screen.
3. Distance of light from subject.
4. Proper placing of the reflector.

For Correct Exposure

1. Size of flash.
2. Size and color of room.
3. Color, complexion of subject.
4. Distance of flash from subject.

If your camera has a lens marked with the "*f*" System, use *f*.11; with lenses marked with the Uniform System, use U. S. 8; with a Single Lens use stop No. 1, and with a box camera use the largest opening.

The Photoflash Lamp

The Photoflash Lamp resembles an ordinary incandescent bulb such as is used for household lighting. This bulb, however, contains oxygen and a quantity of crumpled-up aluminum foil.



The Photoflash Lamp.

The Photoflash Lamps are merely screwed into an ordinary lamp socket or into the end of a special tubular hand flashlight. When the current is turned on, the specially coated filament immediately ignites the aluminum foil and an instantaneous flash of great intensity and actinic quality results. Fast lens equipment is not needed where the Photoflash Lamp is used.

With the Photoflash Lamp, intimate little pictures are easily made about the home. The family at dinner, the youngsters lolling on the floor looking at the "funnies," Dad tuning in on his favorite program, the backgammon game, wee Willy with his train and similar subjects can now be easily taken.

The Photoflash Lamp gives no smoke, no odor; it is noiseless and presents no fire hazard. The flash is quick enough to catch a child at play, and a portrait exposure is made before the subject can close his eyes. This light is so easily portable that pictures can be made in any part of the home. The lamps are on sale in most photographic stores.

While the Photoflash Lamp may be used without a reflector it is made more effective where one is employed. Special reflectors may be secured. Where the reflector is not purchased it is well to hold a piece of white cardboard or tin back of the lamp.



With special tubular hand flashlight and reflector.



Made with one Photoflash Lamp,
8 feet from subject;
stop *f.8* (U. S. 4).

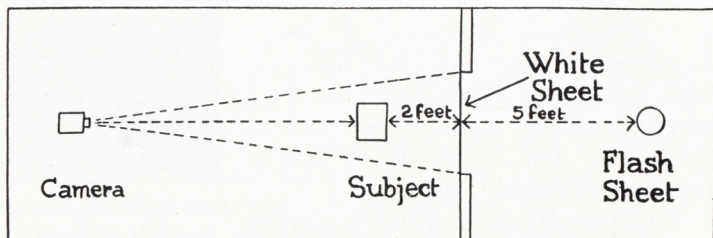
The picture shown here is an example of what can be done around the home at night. Outdoor night pictures of at least fairly nearby subjects, such as a group around a campfire, may also be taken with this lamp.

Photographic Silhouettes

Photographic silhouettes can be made indoors either by daylight or flashlight, but as the strength of daylight varies considerably, the surest way of obtaining correctly exposed silhouette negatives is by flashlight.

Two rooms with a doorway between them are needed. The opening is covered with a sheet stretched so that no wrinkles are seen. The subject is placed before the sheet

facing at a right angle to the camera, in full profile. The flashlight should be placed on the opposite side of the sheet in a line with subject and camera as shown in the diagram.



A Photoflash Lamp may be used instead of a Flash Sheet.

Just before making the exposure, turn off all lights in both rooms, then open the shutter, make the flash, close the shutter and turn on the lights in the rooms again.

For Vest Pocket Kodaks and $2\frac{1}{4} \times 3\frac{1}{4}$ cameras a No. 1 Eastman Flash Sheet should be used; $2\frac{1}{2} \times 4\frac{1}{4}$ to $3\frac{1}{4} \times 5\frac{1}{2}$ cameras will need a No. 2 Eastman Flash Sheet.



Silhouettes make very interesting and unique pictures. They can be used for making unusual personal greeting cards, as illustrated on page 20.

The Christmas Tree

The Christmas tree is another favorite subject for the Kodak and one that is not difficult to photograph by a simple flashlight. It is best done as soon as the last touch has been given the decoration of the tree and when the small folks are sound asleep.



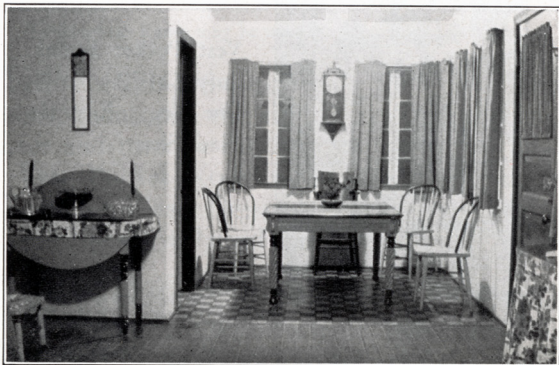
Vest Pocket Kodak.
Stop $f.11$ (U. S. 8).
One No. 3 Eastman
Flash Sheet.

Set the Kodak in position to show all the tree in the finder, with stop $f.11$ (U. S. 8) and the shutter opened at time, ignite a No. 3 Eastman Flash Sheet, a No. 6 (formerly No. 1) Eastman Flash Cartridge or use a Photo-flash Lamp with reflector, placed slightly behind and to one side of the camera, at a height of about six feet. Close the shutter immediately after the flash. The ordinary illumination of the room will not affect the film while the shutter is open, providing none of the lights show in the finder.

When a single lens camera of either the box or folding variety is used for photographing Christmas trees under similar conditions, use the largest stop opening.

Interiors by Electric Light

City homes are sometimes so close to other buildings that it is not always possible to get enough illumination to photograph some of the rooms by daylight. When electric light is available this difficulty is overcome. By using plugs that will hold two, three or four lamps and connecting with the nearest floor or ceiling outlet, any quantity of light can be placed where it is needed. The regular wall and ceiling lights will often supply enough illumination, or if more light is needed lamps of higher wattage can be used.



One 60-watt lamp in ceiling in dining alcove. One 60-watt lamp in ceiling in living room over camera.
Exposure two minutes at *f.11* (U. S. 8).

The illustration above shows a dining room alcove photographed by a single sixty-watt lamp in the regular ceiling fixture over the table, and another sixty-watt lamp in the living room, directly over the camera. The exposure was two minutes with stop *f.11* (U. S. 8); larger rooms with dark wall paper and hangings would of course need more illumination and longer exposure. Each room will call for its own exposure, but it will soon be found comparatively easy to estimate a satisfactory exposure.

Lighted floor and table lamps can be photographed in their normal positions and will not fog the picture if the bulbs do not show through or under the shade. They photograph much more attractively when lighted and can improve many an interior picture.

A distinction must be made between lamps that show in the picture area and those that do not show but are used for illumination. Brilliant pictures can only be made by artificial light, when the light, from the lamps that are not in the picture, is prevented from shining directly into the lens while the exposure is being made. A magazine or newspaper can be so held as to shade the lens from direct light.

Portraits by Electric Light

Portraits can be made indoors by electric light if you have a Kodak with an *f.4.5*, *f.5.6* or *f.6.3* lens and one or two high-powered electric bulbs. One or two 200-watt lamps, mounted either singly or in a double socket with a reflector of tin or white cardboard, can be made to take the place of sunlight and home portraiture can be added to the other indoor camera possibilities.



Exposure 1 second, *f.4.5*.

The illustration was made with one 200-watt bulb in a floor lamp on the left and a 100-watt bulb on the right, with an exposure of one second at *f.4.5*. Smaller stop openings such as *f.5.6* or *f.6.3* would require more light or more exposure or both, and as adults can hold a pose for a number of seconds, a few trials will soon demonstrate how much light and exposure is required for your individual equipment.

Photoflood Lamp for Indoor Pictures

Night photography indoors, such as home portraits, family groups, still-life studies, and intimate home life scenes in which action can be suspended for about one to five seconds, are easily and simply made with the new Mazda Photoflood Lamp.

This lamp, not to be confused with the Photoflash Lamp, is similar in appearance to the usual 60-watt Mazda lamp and is used in the same sockets. It gives, however, a light equivalent to that of a 750- to 1000-watt general service lamp. This intensely brilliant light—the result of overloading the filaments—is very effective for photographic purposes and, although the life of the lamp is shortened by this overloading, its effective life of approximately two hours is sufficient for such a number of exposures as to make the cost per picture negligible. The Photoflood Lamps cost 35 cents each.

A reflector should be used around or behind the lamp, to obtain full light value. A sheet of white cardboard with a hole through it will serve, or suitable reflectors can be had at small cost. A reflector increases the power of the light three or four times; without one the exposure must be three or four times longer.

The exposure will, of course, vary with the nature of the subject, distance of light from subject, and size of lens opening. With two or more lamps the exposure will be relatively and considerably less.

When ready to make the exposure, turn on the Photoflood Lamp, open the shutter of the camera for the time required, close the shutter and then turn off the Photoflood Lamp at once. When photographing living subjects, turn on the lamp several minutes before making the exposure. This allows the subject's eyes to become adjusted to the light. As many good pictures can be made

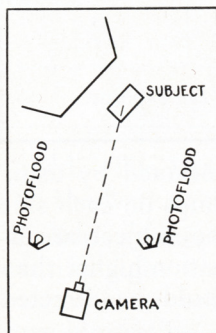
during the two-hour life of the lamp as your speed of operation permits. *Do not leave the Photoflood Lamp lighted any longer than is necessary.*

As a general guide, it may be taken that with Kodak Verichrome Film an exposure of two to five seconds will be sufficient at night, with any single-lens camera, including the box-type cameras, using one lamp in a reflector at six to eight feet from the subject, and using the largest stop opening of the camera. With a double-lens camera, one second at $f.8$ (U. S. 4) should be sufficient. The picture below was made with a $1/10$ -second exposure at $f.6.3$, using two lamps in reflectors. An even faster lens, the $f.4.5$, would cut the exposure to $1/25$ -second.

- 2 Photoflood Lamps
about four feet from
subject.

Exposure $1/10$ second
with stop $f.6.3$.

Kodak Verichrome
Film negative.



The following table gives the approximate exposures required for the different apertures and distances, and the number of lamps required.

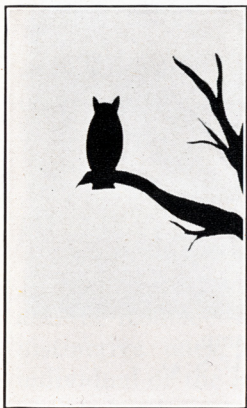
Time Exposures with Kodak Verichrome Film			
<i>Distance Lamps to Subject</i>	<i>Diaphragm or Stop Opening</i>	<i>Number Lamps in Reflectors</i>	<i>Exposure in Seconds</i>
4 feet	<i>f. 4.5</i>	1	1/5
"	<i>f. 6.3</i>	1	1/2
"	<i>f. 8</i>	1	1
"	<i>f. 11</i>	1	2
"	<i>f. 16</i>	2	2
6 feet	<i>f. 4.5</i>	1	1
"	<i>f. 6.3</i>	1	1
"	<i>f. 8</i>	1	2
"	<i>f. 11</i>	2	2
"	<i>f. 16</i>	3	3
10 feet	<i>f. 4.5</i>	1	2
"	<i>f. 6.3</i>	2	2
"	<i>f. 8</i>	3	2
"	<i>f. 11</i>	4	3
"	<i>f. 16</i>	5	5
Doubling the number of lamps will halve the exposure.			

The best lighting of the subject is obtained by using two or more lamps and arranging the lamps on each side of the camera, so that both sides of the subject are illuminated. The lamps should be in a position higher than the head of the subject, and they should be directed downwards.

Interesting backlighting effects can be obtained by using an *additional* lamp in a shaded table or floor lamp placed behind the subject. Do not allow the direct rays of light from the lamp to enter the lens of the camera.

Caution: These lamps will become quite hot, therefore the fabric of any lamp shade should not be allowed to come in contact with the lamp bulbs.

When the lamps are used for general illumination to make a picture of a room, it will be advisable to use an opening such as *f.16* (U. S. 16) to get sufficient depth of focus. This will require an exposure ranging from ten to thirty seconds, depending on the distance included, number of lamps, and the color scheme of the room, whether light, dark, or medium.



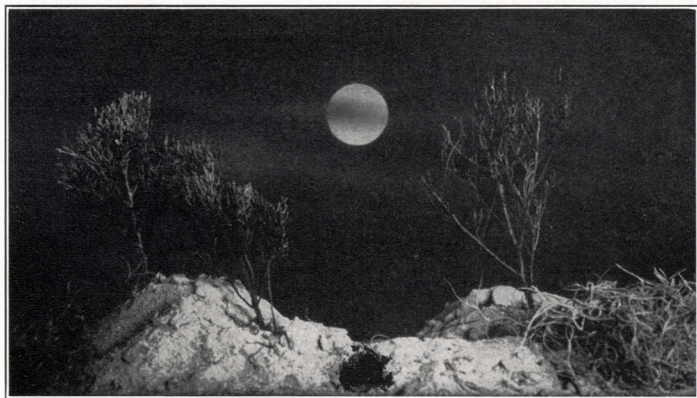
The Photoflood Lamp can be used for making silhouettes in place of daylight or flashlight; it is more uniform than the former and more convenient than the latter. Following the general directions on pages 9 and 10, an exposure of four to six seconds will be required with the largest opening of a single lens camera, using Kodak Verichrome Film and a single Photoflood Lamp in a reflector. With stop *f.8* (U. S. 4) the exposure should be about three seconds, or two seconds if stop *f.6.3* is used. The lamp should be placed at the same height from the floor as the lens.

Still-life studies offering many opportunities for making beautiful light and shade effects, are made possible by these concentrated light sources. A few experiments will prove interesting.

Table Top Studies

Table top photography gives the amateur an opportunity to wander from the beaten track of outdoor snapshots, and attempt experiments with the unusual, something which is purely the creation of one's own ingenuity and imagination.

The table top comes in as the base of operations, on which you build up any fancy your imagination leads you to, from the simplest arrangement of fruit and flowers to an elaborate "set" simulating a windswept, moon-lit desert.



Illumination: one 200-watt lamp.

Exposure: one minute, stop *f*.8 (U. S. 4).

Our illustrations show the possibilities; the fruit and flower picture needs no description, it is but one of the thousand and one similar pictures you can compose on the dining room table with a plain cloth for a background, and using a Kodak Portrait Attachment. The wild desert scene is made up of a small heap of sand, a few evergreen twigs, a round piece of white paper (smeared



With Kodak Portrait Attachment.

with charcoal or black lead for the cloud effect) for a moon, and a piece of black cloth for a background. Other arrangements can, of course, be anything you fancy. The whole layout for the picture was not more than four feet square and a little over one foot high. The lighting of this scene was made with one shaded 200-watt lamp hanging above and a little to one side of the "set-up." The

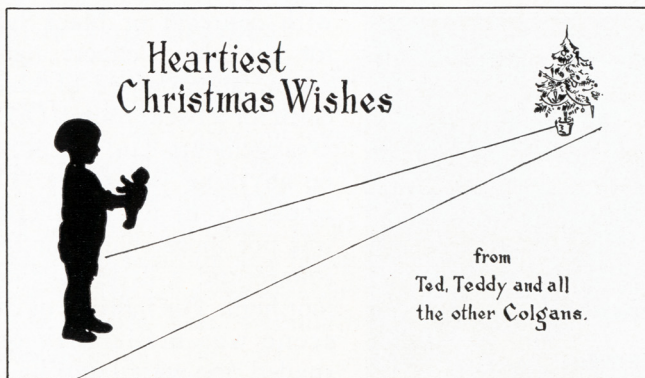
exposure was one minute with stop *f*.8 or U. S. 4.

Dolls, toy animals, mirrors, celluloid ducks and swans are but a few of the many things around the home that can be used very effectively and the variety of pictures is limited only by your imagination.

Personal Greeting Cards

The personal greeting card is rapidly coming into favor and the Kodak enables you to make the truly personal and distinctive ones, showing as they do, the family, an individual or the home.

No special equipment is needed, as the simplest box camera will produce negatives suitable as a basis from which to work. Look over your good prints or make a special silhouette for the occasion, from the instructions given on page 9. The lettering can be done by hand, or your prints can be mounted on a regular greeting card if a considerable number are required.



Photographic silhouette, hand lettering and decoration.

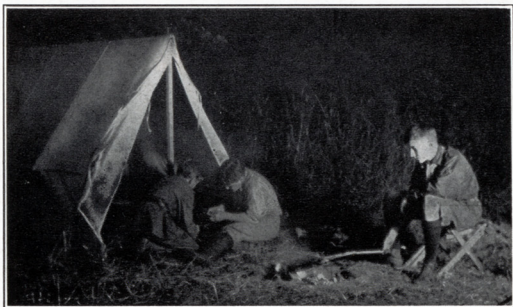


Mounted print on regular or hand printed card.

Our illustrations show just how simple, yet effective, these cards can be. The only limit to the elaboration of the decoration of the cards is your ability to design and execute the personal touches.

Campfire Scenes

The campfire is easily the center of attraction after sundown in any scout or family camp, and many good picture opportunities occur as the campers busy themselves with the corn or marshmallow roast. It is easy to secure good pictures by letting off a flash at the right time.



One No. 3 Eastman Flash Sheet.

The method is quite simple. Set up your Kodak or Brownie on a tripod to include the fire and all or part of the tent. Use stop *f.11*, U. S. 8 or No. 1, or the largest stop opening on a box camera. To one side and slightly behind the camera place a bough, on which to pin a No. 3 Flash Sheet, about five feet from the ground, put a lighted match into the cleft end of a stick at least two feet long and apply it to a corner of the flash sheet, having first opened the shutter of your camera, close it after the flash has gone off. Before applying the match, caution the campers to keep still, and see that none of them are staring at the camera, as this is apt to spoil the picture. Extinguish the match before throwing it away and watch for any embers dropping from the consumed sheet.

Campfire scenes can be easily made with the Photo-flash Lamp with special tubular hand flashlight and reflector, see page 9.

Fireworks

Fireworks offer opportunities for some beautiful and novel pictures. Displays are frequent in the summer time, the "Fourth" especially can be counted on. The effect wanted, is of streams of light with the incidental sparks caught in the slower-moving showers. These lines naturally fall beautifully, tracing graceful patterns that make splendid material for camera pictures.



Shutter open 5 seconds, *f.16* (U. S. 16)..

Since the film is not affected by a dark sky, the shutter may remain open or be reopened to capture successive pieces. The lens must point towards an unobstructed part of the sky in order to get a solid background, and you must be prepared to close the shutter should any spectators get too close to the lens. Many a brilliant burst can be secured with an exposure of one second and as long as they are not set pieces attached to a framework, the camera can be tilted as much as necessary to get the film fairly well filled. You cannot do much to arrange your picture, simply aim the lens at the space where the shells are bursting and you will not fail to get some very beautiful pictures. The camera must be on a firm support, especially when making pictures of set pieces that are on the ground.

Lightning

Lightning is in somewhat the same class as fireworks and what we aim to get are brilliant ribbons of light against a black background, it is more erratic, however, and more patience is required. The most satisfactory method is to place the camera, focused at the 100-foot mark, on a tripod at an open window pointed in the direction of the last few flashes. The shutter, set at time and using the largest opening, is left open, and closed after a single brilliant flash, or it can be left open for several flashes.



Open shutter at
"time."

Point camera at
the sky.

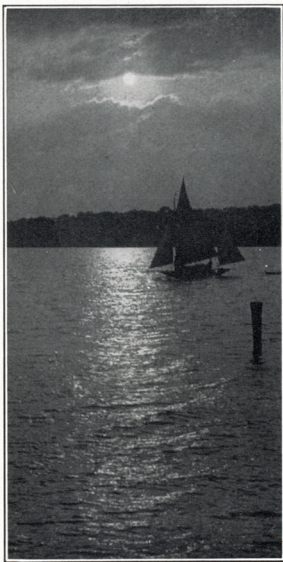
Close shutter after
a flash or flashes.

The only form of lightning that does not picture satisfactorily is sheet lightning, which uniformly illuminates a broad expanse of sky. What we like best are the spectacular pictures—the brilliant zig-zag lines of light which flash across a black sky, and these are furnished by so-called chain lightning, and ball lightning—an unusual form—a fiery ball descending to the earth.

The camera can be held in the hands for photographing lightning, with the shutter set for "time." In this case, however, the film should be turned after each flash so as not to show more than one horizon line.

Moonlight Pictures

Moonlight will make pictures just as sunlight does, but as it is a great many times weaker than sunlight, exposures must be very considerably increased. Perhaps the simplest way to calculate a moonlight exposure is to give 25 minutes for each one-hundredth of a second that would be given for the same scene by sunlight. For example: The exposure in bright sunlight for a landscape with a dark-toned



Above: Real Moonlight.

Exposure 15 minutes *f*.8 (U.S. 4).

Left: "Moonlight" made at sunset.

Exposure 1/100 sec. *f*.8 (U.S. 4).

object in the immediate foreground, would be $\frac{1}{25}$ with stop *f*.11 or U. S. 8. Then the exposure by the light of a full moon would be 100 minutes with the same stops. This could be cut down to 50 minutes with stop *f*.8 or U. S. 4. For a landscape without a dark-toned object in the immediate foreground about 25 minutes with *f*.8 or U. S. 4 would be ample; for distant landscapes the exposure

can be from 10 to 15 minutes. If the ground is covered with snow, shorter exposures can be made, see illustration.

If a full daylight effect is desired these exposures must be multiplied by 4 and this applies only to nights when the sky is clear and the moon is full, the half moon does not give even half as much light as a full moon.

With a single lens, and all fixed focus types of cameras, use the largest stop and double the exposures given above. These suggestions of course, apply only to pictures made by moonlight and not those showing the moon itself.

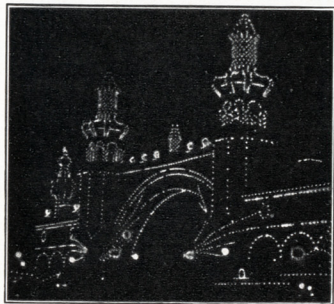
"Moonlight" scenes can be made by sunlight. This is best done during the sunset hour and when there are masses of clouds floating in the western sky which create lighting conditions favorable for picturing "moonlight" scenes by sunlight. The sun must be wholly or partially obscured and if the light is red, yellow or orange an exposure of $1/100$ second with stop $f.8$ can be given, and to secure a night effect from a negative exposed in such a manner, it must be printed long enough so that all but the high-lights will be dark.

Lighted Streets and Public Squares

The "White Way" or theatre district of a large city often offers bright scenes that would make an attractive souvenir and the town or village square with its corner churches and soldiers' monument, is well worth an exposure, especially on a wet night when the pavement shows interesting reflections.

When making night pictures, some lights may have to be included in the picture. In estimating the exposure necessary it is not so much the lights, however, as the general illumination that is important. The pictorial effect may sometimes be improved considerably, by including some of the lights.

The pictures will not show any trace of occasional passing vehicles or pedestrians during the long exposures necessary, providing they do not stop. If an automobile or trolley car approaches, the shutter should be closed or place your hand or hat momentarily in front of the lens, as any moving bright lights will show as streaks in the negative. Exposure will necessarily depend on the quantity and quality of the light and the size of the stop opening. With stop $f.8$ (U. S. 4) or $f.11$ (U. S. 8) an exposure of from two to ten minutes for a well lighted subject will give very satisfactory results. If the illumination is not good, exposure must be increased to twenty-five minutes or more.



Exposure, 5 secs., $f.16$ (U. S. 16).



Exposure, 3 mins., $f.7.7$ (U.S. 4).

Striking effects can be obtained when the lights are shown in silhouette, as tiny white disks on a black ground. They must show no detail whatever, so that overexposure must be avoided as this would record detail in buildings near the lights. Too much underexposure, such as will result if snapshots are made, will not sufficiently record the images of the lights. Use stop opening $f.16$ (U.S. 16) and give an exposure of about five seconds, this will allow for just enough detail to bring out the lights only.

Flood-light Pictures

More and more of our public buildings are being illuminated after dark, and their beauty shown off to great advantage by powerful, indirect lights that bathe the building in a brilliant soft light. The Capitol at Washington, Independence Hall at Philadelphia and the Woolworth Tower in New York, for instance, are beautifully displayed after dark and can be easily photographed with exposures of five to ten minutes with stop *f.16* (U. S. 16).



Exposure, 10 minutes, *f.16* (U. S. 16).

The Niagara Falls picture on the front cover is another example of subjects illuminated by flood-lights. The requirements are a tripod or other firm support for the camera and not too much movement or obstruction near the lens, and street lights must be kept as far out of the immediate foreground as possible. The exposures given are for white light, of course, and the fewer street lights that appear the better the picture. If the street lights are close to the camera they will detract from the flood-light thrown on the subject.

Fires at Night

Fascinating as day photographs are for their volumes of swirling smoke, the night picture of a big fire has a picturesqueness of its own. They don't occur very often in any one place, but when they do it's an opportunity that should not be missed.

A big fire, whether it rages in the light of day or during the hours of darkness, presents an ever changing scene and

you never can tell when or where the next spectacular disclosure will be. It is therefore best as soon as you arrive, to be ever ready, at a safe distance from the fire, to make the pictures of the impressive spectacles as they successively unfold.



At night both sky and landscape are dark and we cannot photograph dark smoke against a dark background. We can, however, make silhouette effects of the fire itself. This can usually be done when the flames are brightly outlined against the darkness by giving an exposure of 2 or 3 seconds with a large stop

opening, $f.8$ (U.S. 4). When making exposures with a box camera, always use the largest stop. It is necessary to place the camera on a tripod or some other firm support.

EASTMAN KODAK COMPANY,
ROCHESTER, N. Y.

DETAILED INFORMATION

Given by Service Department

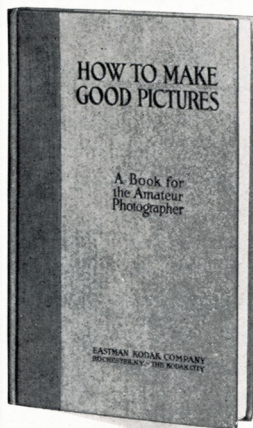
EASTMAN SERVICE...

• While we have indicated in this booklet how certain pictures of more than common interest can be made, you may wish further and more detailed information on some certain phase of photography.

The experts (practical picture makers) of the Service Department of the Eastman Kodak Company, at Rochester, N. Y., are ready at all times to give your inquiries prompt attention and to offer constructive criticism of work when desired. There is no charge—no obligation.

Service Department

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- A PRACTICAL BOOK for the amateur. It describes in a simple, understandable way every phase of photography that the amateur is likely to be interested in, such as various methods of making exposures, developing, printing, enlarging, coloring, making lantern slides, and many other interesting subjects. Profusely illustrated.

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